

## ABSTRACT OF THE DISCLOSURE

A fuel injection control apparatus of an internal combustion engine calculates a basic fuel injection amount according to a predicted in-cylinder intake air amount based on a predicted operating state quantity of the engine, calculates  
5 an actual in-cylinder intake air amount from the actual engine operating state quantity, and calculates a feedforward fuel injection amount by correcting an excess or shortage of fuel due to an error in the predicted in-cylinder intake air amount by using a feedforward correction amount. The control apparatus also calculates a feedback correction amount based on a detected air/fuel ratio and an  
10 air/fuel ratio of an air-fuel mixture determined by the feedforward fuel injection amount, and obtains a final fuel injection amount by correcting the feedforward fuel injection amount with the feedback correction amount.